

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/009, 897A

Source: 1FW/6

Date Processed by STIC: 10/28/04

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 10/28/2004

PATENT APPLICATION: US/10/009,897A

TIME: 15:44:40

Input Set : A:\Q67685.ST25.txt

Output Set: N:\CRF4\10282004\J009897A.raw

3 <110> APPLICANT: KATO, Shingo
 4 Kobayashi, Yoshio
 5 Hiraishi, Yoshiyuki
 6 Shimizu, Kayoko
 7 Sugita, Tetsuyoshi
 9 <120> TITLE OF INVENTION: Method For Determining HIV-1 Subtype
 11 <130> FILE REFERENCE: Q67685
 13 <140> CURRENT APPLICATION NUMBER: US 10/009,897A
 14 <141> CURRENT FILING DATE: 2001-12-14
 16 <150> PRIOR APPLICATION NUMBER: PCT/JP00/03896
 17 <151> PRIOR FILING DATE: 2000-06-15
 19 <150> PRIOR APPLICATION NUMBER: JP 1999-167736
 20 <151> PRIOR FILING DATE: 1999-06-15
 22 <150> PRIOR APPLICATION NUMBER: JP 2000-23581
 23 <151> PRIOR FILING DATE: 2000-02-01
 25 <160> NUMBER OF SEQ ID NOS: 50
 27 <170> SOFTWARE: PatentIn version 3.3
 29 <210> SEQ ID NO: 1
 30 <211> LENGTH: 20
 31 <212> TYPE: DNA
 32 <213> ORGANISM: Artificial
 34 <220> FEATURE:
 35 <223> OTHER INFORMATION: synthetic DNA
 37 <400> SEQUENCE: 1
 38 ctcttgaggg gttagcaaag 20
 41 <210> SEQ ID NO: 2
 42 <211> LENGTH: 20
 43 <212> TYPE: DNA
 44 <213> ORGANISM: Artificial
 46 <220> FEATURE:
 47 <223> OTHER INFORMATION: synthetic DNA
 49 <400> SEQUENCE: 2
 50 ctgtgcatta caatttctgg 20
 53 <210> SEQ ID NO: 3
 54 <211> LENGTH: 20
 55 <212> TYPE: DNA
 56 <213> ORGANISM: Artificial
 58 <220> FEATURE:
 59 <223> OTHER INFORMATION: Synthetic DNA
 61 <400> SEQUENCE: 3
 62 ctcttgaggg tgggtgaaag 20
 65 <210> SEQ ID NO: 4
 66 <211> LENGTH: 20

P.6

RAW SEQUENCE LISTING

DATE: 10/28/2004

PATENT APPLICATION: US/10/009,897A

TIME: 15:44:40

Input Set : A:\Q67685.ST25.txt

Output Set: N:\CRF4\10282004\J009897A.raw

67 <212> TYPE: DNA
68 <213> ORGANISM: Artificial
70 <220> FEATURE:
71 <223> OTHER INFORMATION: Synthetic DNA
73 <400> SEQUENCE: 4
74 aaatggcagt ctagcagaag 20
77 <210> SEQ ID NO: 5
78 <211> LENGTH: 20
79 <212> TYPE: DNA
80 <213> ORGANISM: Artificial
82 <220> FEATURE:
83 <223> OTHER INFORMATION: Synthetic DNA
85 <400> SEQUENCE: 5
86 gcaatagaaa aattctcctc 20
89 <210> SEQ ID NO: 6
90 <211> LENGTH: 20
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial
94 <220> FEATURE:
95 <223> OTHER INFORMATION: Synthetic DNA
97 <400> SEQUENCE: 6
98 acagtagaaa aattcccctc 20
101 <210> SEQ ID NO: 7
102 <211> LENGTH: 20
103 <212> TYPE: DNA
104 <213> ORGANISM: Artificial
106 <220> FEATURE:
107 <223> OTHER INFORMATION: Synthetic DNA
109 <400> SEQUENCE: 7
110 gcaatagaaa aattcccctc 20
113 <210> SEQ ID NO: 8
114 <211> LENGTH: 20
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Synthetic DNA
121 <400> SEQUENCE: 8
122 cacagtacaa tgcacacatg 20
125 <210> SEQ ID NO: 9
126 <211> LENGTH: 20
127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial
130 <220> FEATURE:
131 <223> OTHER INFORMATION: Synthetic DNA
133 <400> SEQUENCE: 9
134 cacagtacaa tgtacacatg 20
137 <210> SEQ ID NO: 10
138 <211> LENGTH: 20
139 <212> TYPE: DNA

RAW SEQUENCE LISTING

DATE: 10/28/2004

PATENT APPLICATION: US/10/009,897A

TIME: 15:44:40

Input Set : A:\Q67685.ST25.txt

Output Set: N:\CRF4\10282004\J009897A.raw

```

140 <213> ORGANISM: Artificial
142 <220> FEATURE:
143 <223> OTHER INFORMATION: Synthetic DNA
145 <400> SEQUENCE: 10
146 aaatggtagc ctagcagaag 20
149 <210> SEQ ID NO: 11
150 <211> LENGTH: 20
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Synthetic DNA
157 <400> SEQUENCE: 11
158 gaatggcagt ttagcagaag 20
161 <210> SEQ ID NO: 12
162 <211> LENGTH: 20
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Synthetic DNA
169 <400> SEQUENCE: 12
170 gtcaaattggc agtttagcag 20
173 <210> SEQ ID NO: 13
174 <211> LENGTH: 22
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Synthetic DNA
181 <400> SEQUENCE: 13
182 ctctctgagga tgggtgcaaat tt 22
185 <210> SEQ ID NO: 14
186 <211> LENGTH: 22
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Synthetic DNA
193 <400> SEQUENCE: 14
194 ctctctgagga tgggtttaaaa at 22
197 <210> SEQ ID NO: 15
198 <211> LENGTH: 22
199 <212> TYPE: DNA
200 <213> ORGANISM: Artificial
202 <220> FEATURE:
203 <223> OTHER INFORMATION: Synthetic DNA
205 <400> SEQUENCE: 15
206 ctctctgagga tgagttaaaat tt 22
209 <210> SEQ ID NO: 16
210 <211> LENGTH: 20
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial

```

RAW SEQUENCE LISTING

DATE: 10/28/2004

PATENT APPLICATION: US/10/009,897A

TIME: 15:44:40

Input Set : A:\Q67685.ST25.txt

Output Set: N:\CRF4\10282004\J009897A.raw

```

214 <220> FEATURE:
215 <223> OTHER INFORMATION: Synthetic DNA
217 <400> SEQUENCE: 16
218 tcctgcagat gagttaaagg                20
221 <210> SEQ ID NO: 17
222 <211> LENGTH: 20
223 <212> TYPE: DNA
224 <213> ORGANISM: Artificial
226 <220> FEATURE:
227 <223> OTHER INFORMATION: Synthetic DNA
229 <400> SEQUENCE: 17
230 tcctgaggat ggtttaaagg                20
233 <210> SEQ ID NO: 18
234 <211> LENGTH: 20
235 <212> TYPE: DNA
236 <213> ORGANISM: Artificial
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Synthetic DNA
241 <400> SEQUENCE: 18
242 aatttctggg tccctcctg                20
245 <210> SEQ ID NO: 19
246 <211> LENGTH: 20
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial
250 <220> FEATURE:
251 <223> OTHER INFORMATION: Synthetic DNA
253 <400> SEQUENCE: 19
254 aatttctaga tctcctcctg                20
257 <210> SEQ ID NO: 20
258 <211> LENGTH: 20
259 <212> TYPE: DNA
260 <213> ORGANISM: Artificial
262 <220> FEATURE:
263 <223> OTHER INFORMATION: Synthetic DNA
265 <400> SEQUENCE: 20
266 ctgttaaagt gcagtctagc                20
269 <210> SEQ ID NO: 21
270 <211> LENGTH: 22
271 <212> TYPE: DNA
272 <213> ORGANISM: Artificial
274 <220> FEATURE:
275 <223> OTHER INFORMATION: Synthetic DNA
277 <400> SEQUENCE: 21
278 ctcaactact gttaaagt ag                22
281 <210> SEQ ID NO: 22
282 <211> LENGTH: 20
283 <212> TYPE: DNA
284 <213> ORGANISM: Artificial
286 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 10/28/2004

PATENT APPLICATION: US/10/009,897A

TIME: 15:44:40

Input Set : A:\Q67685.ST25.txt

Output Set: N:\CRF4\10282004\J009897A.raw

```

287 <223> OTHER INFORMATION: Synthetic DNA
289 <400> SEQUENCE: 22
290 ctgttaaata ggcagcctagc 20
293 <210> SEQ ID NO: 23
294 <211> LENGTH: 20
295 <212> TYPE: DNA
296 <213> ORGANISM: Artificial
298 <220> FEATURE:
299 <223> OTHER INFORMATION: Synthetic DNA
301 <400> SEQUENCE: 23
302 ctgttaaata ggcagtttagc 20
305 <210> SEQ ID NO: 24
306 <211> LENGTH: 20
307 <212> TYPE: DNA
308 <213> ORGANISM: Artificial
310 <220> FEATURE:
311 <223> OTHER INFORMATION: Synthetic DNA
313 <400> SEQUENCE: 24
314 ctgttaaata gtagtctagc 20
317 <210> SEQ ID NO: 25
318 <211> LENGTH: 20
319 <212> TYPE: DNA
320 <213> ORGANISM: Artificial
322 <220> FEATURE:
323 <223> OTHER INFORMATION: Synthetic DNA
325 <400> SEQUENCE: 25
326 aatttctaga tccccctcctg 20
329 <210> SEQ ID NO: 26
330 <211> LENGTH: 20
331 <212> TYPE: DNA
332 <213> ORGANISM: Artificial
334 <220> FEATURE:
335 <223> OTHER INFORMATION: Synthetic DNA
337 <400> SEQUENCE: 26
338 aatttctagg tccccctcctg 20
341 <210> SEQ ID NO: 27
342 <211> LENGTH: 20
343 <212> TYPE: DNA
344 <213> ORGANISM: Artificial
346 <220> FEATURE:
347 <223> OTHER INFORMATION: Synthetic DNA
349 <400> SEQUENCE: 27
350 ctccctgagga gtttagcaaag 20
353 <210> SEQ ID NO: 28
354 <211> LENGTH: 22
355 <212> TYPE: DNA
356 <213> ORGANISM: Artificial
358 <220> FEATURE:
359 <223> OTHER INFORMATION: Synthetic DNA

```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/28/2004
 PATENT APPLICATION: US/10/009,897A TIME: 15:44:41

Input Set : A:\Q67685.ST25.txt
 Output Set: N:\CRF4\10282004\J009897A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:35; N Pos. 102,220,221,222,284,285,296
 Seq#:36; N Pos. 282
 Seq#:38; N Pos. 102,126,193,263,292
 Seq#:40; N Pos. 276
 Seq#:41; N Pos. 41,111,244,286,299,300
 Seq#:42; N Pos. 220,221,222,225,289,296,303
 Seq#:43; N Pos. 16,40,50,70,71,72,73,74,75,76,77,78,88,89,90,91,92,93,109
 Seq#:43; N Pos. 124
 Seq#:44; N Pos. 50,64,65,66,67,68,69,77,79,80,81,91,92,93,94,95,96,112,113
 Seq#:44; N Pos. 114
 Seq#:45; N Pos. 18,28,73,74,75,76,77,78,88,89,90,91,92,93
 Seq#:46; N Pos. 18,64,71,72,73
 Seq#:47; N Pos. 70,71,72,74,100,101,102
 Seq#:48; N Pos. 30,33,47,70,71,72,73,74,75,85,86,87
 Seq#:49; N Pos. 17,27,45,47,48,52,70,71,72,73,74,75,76,77,78,86,88,89,90,91
 Seq#:49; N Pos. 92,93,94,95,96
 Seq#:50; N Pos. 17,21,37,39,47,49,58,64,70,71,72,74,75,83,84,85,86,87,88,89
 Seq#:50; N Pos. 90,106,107,108,143

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
 per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
 Seq#:28,29,30,31,32,33,34

VERIFICATION SUMMARY

DATE: 10/28/2004

PATENT APPLICATION: US/10/009,897A

TIME: 15:44:41

Input Set : A:\Q67685.ST25.txt

Output Set : N:\CRF4\10282004\J009897A.raw

L:466 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:60
L:470 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:180
L:472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:240
L:497 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:240
L:555 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:60
L:557 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:120
L:559 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:180
L:561 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:240
L:605 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:240
L:642 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0
L:644 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:60
L:650 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:240
L:693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:180
L:695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:240
L:697 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:300
L:742 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:744 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:60
L:746 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:120
L:786 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0
L:788 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:60
L:820 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0
L:822 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:60
L:849 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0
L:851 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:60
L:880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:60
L:917 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
L:919 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:60
L:971 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0
L:973 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:60
L:1050 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0
L:1052 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:60
L:1054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:120